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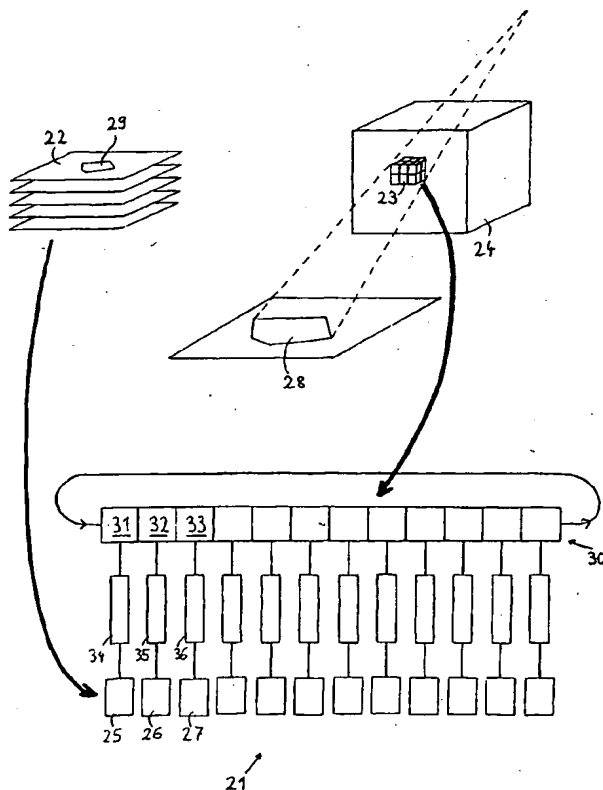
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(54) Title: 3D CONE BEAM RECONSTRUCTION



(57) Abstract: A backprojection unit is described that is adapted for back-projecting pixel data of n acquired projections onto a voxel subvolume, with n being a natural number. For each of the n projections, the backprojection unit comprises voxel center determination means adapted for projecting m contiguous voxels onto a respective one of the projections, with $m \geq 2$ being a natural number, memory access means adapted for fetch-ing, for each of the m projected voxel centers, pixel data of pixels adjacent to the projected voxel center from a respective projection buffer, and multiplexing means adapted for distributing the fetched pixel data to m different pipelines. Furthermore, a method for backprojecting pixel data of n acquired projections onto a voxel subvolume is disclosed.

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